



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

BOTANY.

A New Book on Ferns.¹ — For all who study or wish to study our native ferns, Dr. Waters has prepared a book which is sure to prove both helpful and inspiring. The numerous photographic illustrations include enlarged views of the fructification in which the generic characteristics are often surprisingly well brought out. Specific and varietal differences which frequently prove perplexing to beginners are clearly shown in photographs of fronds or entire plants. Sometimes these are grouped instructively in series to exhibit the range of variation. Especially charming and significant are the views showing typical habits and habitats.

The text besides pointing out the features by which forms are discriminated, directs attention most happily to the out-door aspects of ferns — their adaptations and preferences — in a way to encourage the best sort of field work. As a help to determining specimens not in fruit the key based upon characters drawn from the stipes will doubtless prove welcome to all students of the group. While exception might be taken to such unnecessary departures from botanical accuracy as the use of “stem” for stalk or stipe, the substitution of untechnical for technical expressions has been, on the whole, skillfully done. Dr. Waters writes as a lover of ferns and his contagious enthusiasm suffuses the whole book.

F. L. S.

Porter's Flora of Pennsylvania.² — For sixty-five years Professor Porter was an assiduous and intelligent collector and student of the flora of the State in which he lived. A contemporary of Darlington, Torrey and Gray, he shared their knowledge and views; but he lived to see a school of natural grouping of orders, species segregation, and nomenclatorial reform, quite different from theirs, come to the front, and the editor of this posthumous Flora tells us that being thoroughly acquainted with the author's ideas he can confidently say

¹ Waters, Campbell E., Ph. D. *Ferns: A manual for the Northeastern States, with Analytical Keys based on the Stalks and on the Fructification, and over 200 Illustrations from Original Drawings and Photographs.* New York, Henry Holt & Co. 1903. 4to, xii + 362 pp.

² Porter, J. N. *Flora of Pennsylvania.* Edited, with the addition of analytical keys, by J. K. Small. Boston, Ginn & Co., 1903. 8vo, pp. xv + 362, with outline map.

that he would have heartily subscribed to everything in it as published. The book is essentially a list of the spermatophytes or flowering plants of the State, arranged in the phylogenetic sequence of Engler and Prantl, with keys to the orders, families, genera and species, and copious indexes to Latin and vernacular names. The nomenclature adopted is apparently based on the Rochester code, a common name is given for each species, with a reference to its description in Britton's *Manual*, and its figure, if one is published, in Britton and Brown's *Flora*,—to supplement the terse characters embodied in the keys; and each is accompanied by a brief indication of habitat, general geographic distribution, and an enumeration of the counties in which it occurs in Pennsylvania. As a determination hand-book, it is one of the best local floras thus far published. Its defect—if it be one—lies in the omission of all synonymy, leaving a very large proportion of the plants under names different from those by which they were known to the author during the greater part of his life and by which his contemporaries referred to them in their classic publications, and without intimation to the novice that this is the case or direct indication of any means by which the two may be correlated,—the *Manual* referred to being of no assistance in this matter.

W. T.

The Journals.—*Botanical Gazette*, February:—Darwin, "On a Self-recording Method applied to the Movements of Stomata"; Holferty, "The Archegonium of *Mnium cuspidatum*"; Lewis, "Studies of some Anomalous Dicotyledonous Plants"; Shriner and Copeland, "Deforestation and Creek Flora about Monroe, Wis."; Snow, "The Effects of External Agents on the Production of Root Hairs"; Duvel, "Preservation of Seeds Buried in the Soil"; MacMillan, "Cumaphytism in Alaria."

Botanical Gazette, March:—Garber, "The Life History of *Riccio-carpus natans*"; Merriman, "Vegetative Cell Division in *Allium*"; Smith, "Undescribed Plants from Guatemala and other Central American Republics—XXV"; Thom, "*Craterellus taxophilus* a New Species of Thelephoraceæ"; Greenman, "Notes on South-western and Mexican Plants."

Botanical Gazette, April:—Bennett, "Are Roots Aerobic?"; Nelson, "Contributions from the Rocky Mountain Herbarium—V"; Lyon, "The Evolution of the Sex Organs of Plants";